

ITEMS OF INTEREST.

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Notes from the Profession.

SIDE-LIGHTS IN DENTAL PRACTICE.

DR. J. A. OSMUN.

[Read before the Brooklyn Dental Society.]

There are gentlemen in our ranks who are scientific, and can tell you what to do for any case that presents itself, and yet they never achieve success; others who have no scientific knowledge, nor ability as an operator, by perseverance achieve both. Why? Because the one lacks business sagacity, and perhaps professional tact, while the other has both. As well might a seafaring man expect to make a successful voyage without chart and compass, as for a professional man to hope for success without tact and sagacity.

It would not be in order to refer at length to such first principles as cleanliness of office, instruments and person; and yet it is worth while now and then to jog the memory on this subject.

Among the first things to impress ourselves favorably on our patrons, and add comfort and joy in our daily tasks, is system. How can we expect to operate successfully and expeditiously, without a definite system? I believe many failures we see are from neglect of this most important factor. John Hunter, the celebrated surgeon, being asked by what method he had attained to such success, answered: "My rule is deliberately to consider before I commence, whether the thing is practicable; if it is not, I do not attempt it; if it is, I can accomplish it if I give sufficient pains to it; and having begun, I never stop till it is done. To this rule I owe all my success."

With this settled plan in mind, and working to it, we not only accomplish the end desired in shorter time, but with less fatigue to ourselves and to our patient; we also give our client confidence in our ability. It is by lack of order in the beginnings of our work that bad and careless ways in operating become our habit.

By developing and training our faculties for the work in hand, the physical and nervous strain becomes less; and the greater experience we have, the more confidence we acquire.

Probably nothing tires one so much as a hurried feeling, caused largely by the feeling that the moments are flitting by while we see no progress. The mind tires the body, and often we try to drive with whip and spur to recover lost ground. How necessary is it, then, to have the plan of each operation worked out in our own mind, so that each step shall only be the unfolding of the whole; thus seeing the end from the beginning. With this tranquillity of mind and settled order, we can accomplish wonders.

To diagnose our patients accurately, to give a prognosis that subsequent events shall prove founded on scientific data, and to humor their idiosyncrasies, requires skill and tact, which will impart a high opinion of our professional ability. But it calls for all the powers at our command. We must study human nature, for patients have warm sentiments, strong passions and vivid imaginations. Our aim should be to fathom the mind, to discover its peculiarities, and to harmonize circumstances to its peculiar conditions. We shall in this way become a keen observer of men and things, and a student of human nature. Perfect frankness in explaining devices used, and the course is pursued, and a distinct statement of the results likely to ensue will instil confidence. Being forewarned is being forearmed, and I find when patients realize the difficulties to be overcome, and know the means to be used, they render much assistance; and should there be failure, their knowledge of the obstacles prepares them for the result.

With children, this will be found of the greatest benefit, making a pleasant visit and successful operation of what might have been a wearisome task.

David Crocket never said a truer thing than, "Be sure you are right, then go ahead." This should be our motto. When you have diagnosed a case do not give your opinion till you are convinced you are right, and then stick to it, unless you have the most positive reasons for changing your mind; if so, give some of the reasons that induced you to change, that your patient may know the "whys." To say that in your judgment so and so ought to be done, and when the patient makes some objections to say, "I guess it might as well be different," etc., does not impress them with a sense of your professional superiority.

This brings us to speak of the dignity that should be observed in and out of the office. The practice of some of having their offices a lounging place and smoking-room for a lot of fellows whose time hangs heavily on their hands, is not commendable. The conversation of such persons is not apt to be of a very high order of intelligence; and besides, the public has an idea that a professional man is above ordinary men, and he is held in high esteem. The people take

cognizance of the little things in your manner, appearance, conversation and habits, and you are observed and criticized accordingly. The lewd story or jest about women will, like chickens, come home to roost; you can never know who hears it, or when or where it will stop in its wanderings. A professional man must preserve a proper degree of gravity and dignity on all occasions. Frivolous conduct, vulgar jokes and improper familiarity are unbecoming and unprofessional. This does not condemn good nature; the one can be appreciated, and it helps us; the other detracts.

If you have the ability to control your temper and to maintain a cool and philosophic composure under the thousand and one annoyances and provocations that arise in daily practice, you may thank your guiding star; for a brusque manner is always to be deplored.

The power of impressing those who come into your office, or those you casually meet, of your ability and of your adaptability to your calling, is of the utmost importance. To this end self-examinations are of benefit.

The remembrance of names of children or parents, or of the last operation made, and the circumstances attending it, have great weight, and gives the idea that the operator has his profession at heart.

Showing an earnest, anxious, gentle interest and sympathy in all painful operations, will insure loyal patients.

Avoiding all deceptions is important. "A cunning trick helps but once, and hinders ever after."

A reputation for just and honest treatment is invaluable. Every minute spent in studying and every effort put forth in making operations less painful and more expeditious will be of the greatest profit. Patients are quick to discern, and herald every effort for their comfort; for at the best it is with a real dread that most people visit a dentist. If we possess the power, either natural or acquired, to make them feel that they are going to suffer the minimum of pain at your hands, it is of incalculable benefit, both for the patient and for yourself; for I am sure I voice the experience of every dentist when I say the greatest drawback to successful operations in our specialty is the procrastination of patients. They put off till the last moment a visit that should have been made months and perhaps years before.

To obtain immunity from painful operations we must be progressive. As new ideas and theories and appliances come to the front, whether we believe in them or not, it is our bounden duty to carefully investigate; and if there be only one kernel of truth to a bushel of chaff, we must utilize the one grain.

The dental profession is given to ride hobbies. But a short time ago the practice was to cap all pulps, but what has come of all the

wonderful successes that we heard so much about? Now the pendulum has swung to the other extreme, and it is said an exposed pulp is better destroyed. As they say out West, about Indians, "The only good one is a dead one." Yet the successful practitioner will not be prejudiced. It is well not to be biased too quickly or strongly in favor of any new and untried operation or remedy. The idea that you are an experimenter is "sure death." No one likes to be the victim of an experiment. The skill to manage these things adroitly, and at the same time impress your patient that you are interested in every valuable new thing, is the strength of a professional man.

It is well not to set your heart on the continuance of the patronage of any one as your patient; for the firmest and most steadfast friend of to-day may be your enemy to-morrow, and from no fault of yours. "Trifles light as air" will sometimes sever from you families or patients. A whim, a caprice, a look, a word, or some fancied neglect will serve to break the harmonious relations of years; and perhaps they will choose some ignorant and shallow fellow, who has nothing in this wide world to recommend him but his abundance of cheek and lack of skilfulness. Yet you must bear the wrong without showing the slightest chagrin.

We have those among us who say, as long as we do our professional work satisfactorily the public have no business with our private life. That may be all right in theory, but it don't work in practice. The professional man should have respect for religion; he should have the highest regard to his own moral behavior, and for the esteem in which others hold him. People soon "size" a man up, and he fights a one-sided warfare who has to overcome prejudices affecting his personal habits and his moral standing. A more pernicious notion never entered into the mind of any professional gentleman, than that the public has no business with his social life. Once let a practitioner get the name of being immoral, addicted to intoxicants, or as associating with questionable characters, and he will soon have plenty of leisure for reflection. Often his very companions will hesitate before trusting wife or children under his professional care, and the pure and upright will, of course, be chary of his company.

A progressive dentist is always a member of some professional society; not that a dental society is a specific for all personal deficiencies, or a panacea for all professional shortcomings. Here a word to the younger members of such gatherings. Always feel and show the utmost respect for your seniors in practice. Not that you must necessarily endorse their theories or practice; but there is no type of dentists so unworthy of respect as those who show contempt for their seniors. You may have a little more skill in your fingers, and be a

little more deft in certain directions, but they have ripened judgment and sound discretion; and whether they have or not, they certainly merit our highest esteem and courtesy. The practice of dentistry isolates a man from his fellows; busy from hour to hour, and from day to day, they may remain strangers to each other, unless brought in contact in such a society. Then the friction of mind against mind broadens our views, and makes us more liberal. It gives us the opportunity of studying different peculiarities of practice, to learn what constitutes the strong points of those who are successful, to see imperfections to avoid. It also serves to form new combinations of ideas, and fresh streams of knowledge, for there is no one so humble who has not some valuable idea or suggestion that you may be a stranger to. Need I add that it is incumbent on every one to add his influence and aid in its support, by his presence, his ability and his voice? If we desire to see our calling take the front rank among the liberal and learned professions we must each add our own mite to raise the standard.

Many of our profession are forgetful of the importance of saving something for the proverbial "rainy day." I know of nothing so deplorable as to see a man who has been faithful to his calling come down to old age and be without this world's goods, enough at least to be comfortable. Even while he is accumulating, it adds to his usefulness, influence and success; for "to him that hath it shall be given."

Every profession has both its humorous and its pathetic side, its lights and shades, and ours is no exception. Dealing, as we do, with organs full of life and vitality, with people full of dread of our operations, sometimes so constituted that the smallest mote seen in the future assumes gigantic proportions; having to soothe the fearful and nervous, prop failing courage, deal with the weak and invalid—calls for an educated judgment and for cool and dispassionate action. This must be a drain on our time and vitality.

Prof. Vian's Method of Local Anesthesia.—A two per cent solution of carbolic acid and cocaine, as found in last ITEMS, page 28, in my experience, is not a safe nor certain local anesthetic. I have operated on about thirty patients since this method was published in your journal of July last. I have had several whose faces the day following were very much swollen on the side from where the tooth was extracted, and on yesterday I came very near losing a patient from the effects of it. It is well to try new things, but it is necessary to be cautious, both for our own reputation and the safety of our patients. Let us make haste slowly, especially with these anesthetics.

J. CALDER.

Evanston, Wyoming Territory.

THE SUCCESSFUL FUSING OF PORCELAIN AND CONTINUOUS GUM WORK, ETC., IN THE GAS FURNACE.

DR. C. H. LAND, DETROIT, MICH.

It is now about three years since my efforts were directed toward the production of a satisfactory gas-furnace; and since my first completed apparatus was brought to the notice of the dental profession, I have only found it necessary to perfect the minor details. Two years constant and almost daily use of my original theories have thoroughly proved them to be established facts; and the gradual development of the numerous minor details, have resulted in a thoroughly satisfactory and reliable gas-furnace. Having discovered that the "gasing" of artificial teeth was directly caused by the action of the fixt gas monoxide of carbon (CO), I then devised my counter-blast furnace, the effort being to overcome the detrimental effects, by offering a counter resistance, first by the use of nitrogen, and finally the atmosphere; which has proved to be thoroughly satisfactory, so far as porcelain is concerned. A continuation of similar experiments have shown that the monoxide of carbon (and it may be also the dioxide, CO_2), and light carburetted hydrogen, will pass through the pores of the muffle whether it is made of metal or fire-brick. During the past year, a series of experiments was tried with the view of demonstrating that the "smoking" of decorated china was from the action of this gas and not free carbon, as commonly supposed. In the usual china kilns the interior receptacle is composed of a cast-iron pot about a half-inch in thickness. Into this receptacle the china was packed, the top being securely sealed so as to make it as nearly air and gas-tight as possible. Thus, not a particle of either air or smoke could get into the interior without passing directly through the solid half-inch of cast-iron. The pot was then submitted to the action of a strong Bunsen burner blast, not allowing any smoke or free carbon to form in the combustion chamber. The heat was raised to about 1800 degrees F. Notwithstanding all these precautions, when the ware was removed it was found to be badly discolored, some of it being quite black. A large quantity of the black oxide of iron was found in the interior of the pot and on the iron supports that held the china in place. The supports at the bottom were much more saturated than those at the top, and the lower side of them was more effected than the upper. Also traces of a greater volume of the gases were visible more in some places than others. Here then was a conclusive evidence that either the monoxide of carbon or the dioxide or perhaps both, passed through the iron receptacle; the dioxide would in all probability produce the black oxide of iron in the interior, and if this did take place, by giving up one of its equivalents of oxygen, the residue would be monoxide of carbon; this latter gas then would be in

condition to unite or penetrate the ware or leave its free carbon on the china. The experiments were carried still further, the iron pot was perforated on the bottom and a $\frac{3}{8}$ piece of gas-pipe attached thereto, when all the smoked ware was again placed in the pot and sealed up, except a $\frac{3}{8}$ pipe at the top for an escape-flue; the blast was applied again and brought up to the same temperature. A current of the atmosphere was made to pass through the interior of the pot and out at the top, and on removing the ware it was found that the oxygen of the atmosphere had united with the carbon in the china, and by converting it into the dioxide had caused it to be thoroughly eliminated. Thus the ware was restored to its original whiteness. And in the interior of the pot a large quantity of the red oxide of iron had formed in place of the black oxide. During the past month we have restored a large quantity of smoked ware in this simple manner, which heretofore could only be restored by the use of hydrofluoric acid, a long and disagreeable process. In the burning of artificial teeth the same effects are produced. From a series of similar experiments in teeth, I have found that when teeth are once well fused the effects of the gases are not so apparent, that the greatest injury is likely to happen in the biscuiting process, and it takes place before fusion. Therefore in my new counter-blast furnace I keep a strong current of superheated air passing through the muffle, reducing the volume as the heat increases. In this way perfect results are obtained. Teeth that have been gased can be cured by submitting them to the action of a strong and superheated air blast.

To Obtain Access to the Cavity of a Tooth.—In the anterior teeth, where the cavity is on the proximal surface, the first thing is wedging to separate the teeth. The palatal wall is then chiseled down to admit the burs and excavators. In the proximal cavities in the posterior teeth wedging is not always admissible, but the file and disk will usually be required to make space at once. Access for the instruments will be obtained by cutting down the grinding wall, then burring this opening into a dove-tail with fissure-burs. Sometimes, though rarely, it is better to enter proximal cavities from the buccal side; but good work cannot usually be done unless they are well exposed by being located toward that side. Cavities on the masticating surfaces of the bicuspid and molars are opened first with the chisel along the fissures and through the weak walls, followed by the fissure-bur. Cavities in other positions on the teeth must be cut down at the edges to the solid walls, unless cement is to be used, when weak portions may be left which it will support.—*A. H. Thompson, Topeka.*

CARELESSNESS IN MANAGEMENT OF DENTAL VULCANIZERS.

BY GEORGE B. SNOW, D.D.S.

There are shown herewith illustrations of parts of the remains of two vulcanizers, which illustrate the consequences of careless management in such a graphic manner that they are well worth a few moments' attention.

In both cases the vulcanizer was a No. 2 Hayes' Boiler. One was forgotten, and allowed to attain a temperature so high as to cause bulging of the pot. In Fig. 1 it will be observed that it is stretched almost out of semblance to its original form, and it is noticeable also that the place where the sides have yielded the most to the internal pressure is not half way between the ring and the bottom, but quite near the ring—only about an inch from it.

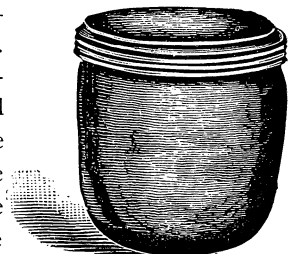


FIG. 1.

This vulcanizer was strained nearly to its capacity of resistance. It probably sustained a pressure of nearly five hundred pounds to the square inch, possibly even more. The symmetrical manner in which its shape has changed speaks well for the uniform strength and toughness of the copper used in its construction.

The second specimen passed the danger point and burst. The tenacity of the copper was in this case also so uniform that the pot only yielded to a pressure so great that, once a rupture was begun, the pot was torn into fragments; and these tell their own story.

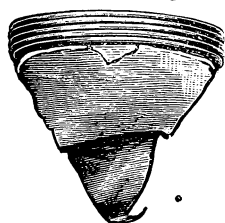


FIG. 2.

On looking at the engraving, Fig. 2, a small point of the copper will be noticed at the front, projecting from the ring. Just below this point, and at the place of greatest yielding, which, as shown by the first example, was about an inch from the ring, the initial rupture took place. This was not in the brazed seam, but a short distance from it. The opening was vertical, passing upward to near the ring, when a division of the rent occurred, leaving the little point of copper which is seen at the front. The sides of the pot were torn in two, and when the rent reached the ring, the internal pressure was so great as to shear off the copper against the edge of the ring as cleanly as though it had been cut. The longitudinal strain finally directed the rents diagonally downwards on either side, so that they met at a point near the bottom, leaving attached to the pot the pointed piece seen at the rear. The other end of the initial rupture ran downward to near the juncture of the sides and bottom, and then divided; run-

ning around the bottom, and meeting at or near the point of the copper seen at the rear (Fig. 2). The fragments were wholly separated, and consisted of the ring, two sides, one only of which is illustrated (Fig. 3), and the bottom (Fig. 4). The latter, being torn loose as described,

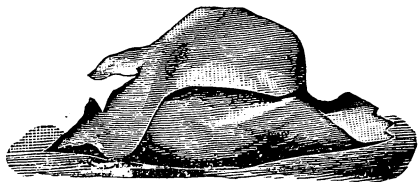


FIG. 3.



FIG. 4.

was thrown downward with such force that it struck something, probably a portion of the heating apparatus, by which a hole was punched through it.

The strain on the pot from the excessive pressure was so great that, once the rupture was begun, it ran the course above described almost instantly; so quickly, in fact, that the opening of the sides of the pot failed to relieve the pressure in time to stop the rupture in its course. The two cases taken together give an instructive lesson, and a very forcible commentary on the folly of carelessness or forgetfulness in the management of vulcanizers. Many dentists fail to realize the significance of the fact that steam pressure is doubled by an increase of about fifty degrees in temperature, and use their vulcanizers with the thermometers or the safety apparatus out of order, without a thought of the danger they incur. Leaving out of consideration the damage which may be done to the rubber, by overheating, danger to life and property is imminent if the vulcanizer is not properly attended to.—*Dental Advertiser*.

Electricity in Extracting.—During the past year I have been experimenting with electricity as a pain obtunder, or anesthetic, in extracting teeth, and have used C. A. Eisenhart's apparatus, and in my hands it has been an utter failure. I have not had six persons give it an unqualified approval. Some patients have spoken of it as Josh Billings did of tight boots. Josh Billings said: "Tite butes is a blessin', inasmuch as they make a man forget all his other troubles." So patients have said: "The electricity is worse than having the tooth out." My experience proves to me that there is less virtue in electricity as a pain obtunder than in the much vaunted Mäboli. I would suggest to all who contemplate trying electricity that they secure the necessary apparatus on probation. C. R. TAYLOR.

Streator, Ill.

HOW TO MAKE AND USE COPPER AMALGAM.

Extract from a letter to Dr. G. V. Black from Dr. Geo. H. Weagant, Cornwall, Ontario.

Nearly fill a tall narrow glass beaker, or other vessel of suitable shape, with a weak solution of sulphate of copper—say one part of a saturated solution to two parts of water. Pour in enough mercury to well cover the bottom of the glass and stand a clean strip or plate of iron in the mercury, allowing the end to project above the glass. Strips of clean sheet-iron, such as stovepipes are made of will do; but heavier iron is better. Pure precipitated copper, in a finely divided state, will at once become deposited on the iron, and soon we will find the mercury uniting with the copper and gradually creeping up the iron till the whole surface is covered with a film of amalgam. This must be allowed to stand undisturbed till the change in the color of the solution shows that all the copper is precipitated. Then, with a syphon, draw off the liquid and renew the sulphate of copper. This proceeding may be repeated as long as the mercury takes up the copper. If the iron is placed for a moment in a weak solution of sulphuric acid—one to five—immediately before immersing in the copper bath, amalgamation takes place more rapidly. When all the mercury has become amalgamated scrape off whatever amalgam adheres to the strip of iron into the glass; pour off the liquid (which is sulphate of iron solution) and turn the mass into the mortar. Rub and wash thoroughly, allowing a stream of water to fall on it from a tap, cleansing out all the free metallic copper and scales of oxide of iron. As soon as it is as clean as it can be made, place it in a chamois-skin and squeeze out the surplus mercury. Then the grinding and washing must be repeated till the mass again becomes soft, when more mercury can be removed. The greatest care must be taken to remove all the little scales and grains of oxide of iron or the amalgam will be dirty to work, and fillings from it will be sure to discolor the tooth structure. When the amalgam has been well cleansed and all the mercury possible squeezed out, heat gently in an iron vessel, and when it begins to get soft rub in a mortar and again squeeze out mercury. The first time it is heated steam is generated from water which remains in the amalgam, so look out that it does not explode and pieces become scattered about and lost. It is advisable to keep it covered while heating at this stage. This heating, rubbing, and squeezing must be repeated again and again till the amalgam becomes very dry and it is found to set immediately and get very hard. It may then be made into little pellets and put away for future use.

A great deal depends on the amalgam being clean and entirely free from any other metal than pure mercury and copper. Iron does

not amalgamate with mercury, and for this reason we make use of it to precipitate the copper. But little grains or scales of oxide of iron become detached from the strip or plate, and it is with the greatest difficulty these can be removed completely from the amalgam unless the following method is adopted: When the amalgam is heated for the first time after washing in water, add sufficient mercury to render the whole mass quite fluid, pour into a wide-mouthed bottle with a small quantity of dry, finely pulverized white sugar (frosting sugar), then tightly cork the bottle and shake vigorously. The oxides and other dirt will adhere to the sugar. Change the dirty sugar for clean, and repeat the shaking till the mercury is quite clear and the sugar fails to become discolored. The sugar and mercury must then be separated completely. Not a particle of sugar must be allowed to remain. Proceed thus: Fold a clean smooth sheet of writing paper as you would fold a filtering paper; place in a clean funnel (porcelain or glass); pour in the mercury and with a fine instrument punch a small hole in the bottom of the filter, when the mercury will run through, leaving the sugar in the paper. Now squeeze in a chamois skin and proceed with the rubbing, etc., as before described.

If at any time the amalgam becomes dirty by overheating or any other cause, it may be cleared by this method.

NOTE.—A weak solution of sulphate of copper is used instead of the saturated solution, as the precipitate is much finer and the amalgam requires less rubbing to bring it to shape.

To use it—place the quantity required in an iron spoon, and hold over a flame till mercury begins to show itself like sweat over the surface of the pellets, then crush and grind in a small mortar (such as are supplied at the dental depots), and work together in the hand till it becomes plastic. If too soft, squeeze in a piece of chamois-skin or course linen, using a pair of pliers if necessary. One soon learns how soft or dry, to use it to get the best results. Do not throw away any of the scraps remaining, as they may be used an indefinite number of times. *Be careful* not to heat too much, as some of the mercury volatilizes, leaving free copper, which becomes oxidized by the heat and makes the amalgam very dirty to handle. While heating watch the little globules of mercury as they pop out and glisten on the surface of the pellet, and the very moment this peculiar *glistening* ceases the amalgam is heated enough.

If the amalgam is too dry and can not be rendered plastic by rubbing in the hand, add a very little mercury, form into pellets and put away to harden. When it is again heated it will probably be found necessary to squeeze out the very same amount of mercury that was added to it.—*Dental Review*.

THE DENTISTS CELEBRATE.

[From *New York Evening Sun* of January 25, 1888.]

NINETEENTH ANNIVERSARY OF THE FIRST DISTRICT SOCIETY--A DESCRIPTION OF THE PERSONAL APPEARANCE AND WAYS OF SOME OF THE DISTINGUISHED MEN AND WOMEN WHO WERE PRESENT.

Cold-blooded dentists from all parts of the country filled the assembly room in the Masonic Temple last night. It was the last meeting in celebration of the nineteenth anniversary of the First District Dental Society of New York State. Taken as a crowd, the dentists were as dignified and impressive as a lot of United States Senators. Taken separately and outside the meeting room, and they were as jolly and convivial as a lot of village school boys. It is seldom a dentist has a chance to enjoy himself, because when at work his hand must be steady and his brain clear. He cannot drink anything, because the taint of liquor on his breath when bending over a patient would ruin his reputation. Therefore, when he gets a chance he has a royal good time, and many of them had such a time last evening and one or two evenings before during this series of meetings. About 500 dentists attended last night, and about fifty of them had been to a big dinner. Strangely enough, one could almost pick out the fifty on general and circumstantial evidence. There was plenty of technical discussion and also plenty of fun. The number of resemblances to prominent men was surprising. The President, Dr. William Wallace Walker, of New York, bears a striking resemblance to President Cleveland, especially in profile. He is, however, a trifle more fashionable in his dress. Last night his expanse of pique shirt-bosom, high open collar, silk figured vest, and red and black tie were strikingly correct, and the mustache he so carefully tended was an evident source of pride.

Prof. C. N. Pierce is one of the most prominent dentists in the country. He is President of the Philadelphia Dental College and lectures in three or four more. Dr. Pierce is a broad-shouldered, red-bearded, bespectacled dentist, with hands that a woman would envy.

Dr. Olga Neyman is a very pretty young lady, who graduated in Philadelphia, has moved to New York, and is said to be one of the most satisfactory lady dentists in the country. Her coquettishly poised turban and neat-fitting dark dress made her very noticeable as she made her way among the crowd of dentists that were discussing all sorts of ways to make humanity miserable.

Dr. N. W. Kingsley is a member of the Lotus Club, for which he has made busts of several well-known men, and his white mustache and high forehead make him look like Bismarck. Dr. Kingsley is said to be the Chauncey Depew of Dentistry, and no dinner is complete without a graceful speech from him after the coffee.

Dr. H. J. McKellops, of St. Louis, is one of the pillars of the profession. His big diamond cross was as brilliant as ever last night, and his general appearance was that of a fashionable man of the world, but for all that he is one of the best dentists in the country.

Dr. J. Foster Flagg looks like a German musical professor and talks like Ben Butler. Dr. Flagg made an address, and his last words were cheered to the echo. His sack coat, gray hair, a la pompadour, and spectacles bespoke a man who thought more of his work than his dress.

Dr. J. W. White, of Philadelphia, was seen in several places, and remarkable for the absence of his hair. Dr. White has all the hospitals of the Quaker City under his wing, and is himself noted as a racy raconteur.

Dr. W. H. Dwinelle was one of the diners, and he had his speech all fixed, and was ready to fire it off at command, but the time gave out, and he had no chance to distinguish himself. Dr. Dwinelle's friends say that his hair is not as numerous as it used to be.

Dr. Charley Robell, the recently defeated Alderman, who wanted but two votes to win, was around explaining how he didn't get those two votes. His friends say they know the story as well as he does.

Dr. Frank Abbot, Dean of the New York College of Dentistry, is an inventor. Last night he had a lot of maps which he said showed something about tumors, but all the other dentists said they recognized the maps as representing canal boats stuck in the Hackensack meadows. The one he showed last looked like an Afghanistan war map.

Dr. Truman W. Brophy, Dean of the Chicago College of Dentistry, was all over the meeting. Some of the fellows in the rear of the hall said Dr. Brophy was soliciting advertisements for a Western journal, but would take anything he saw that was not chained. Dr. Brophy's whiskers suffered in last night's breeze.

Dr. E. S. Talbot, of Chicago, whose specialty is regulating teeth, had a fine specimen, with which he illustrated his remarks. Somebody who could not understand the remarks stole the specimen to take home and study, and Dr. Talbot was correspondingly mad, and when the westerner got mad the crowd in the vicinity thinned out rapidly.

Dr. J. B. Littig fell down the other night and was thought to have broken his leg, but he walked in on both of them last night and received congratulations the rest of the evening.

Dr. Sophy Feltwell, of Pittsburg, Pa., is another lady dentist. Dr. Sophy has the reputation of being one of the finest lady operators in the world.

Dr. A. L. Northrup, of New York, walked around majestically, and looked like Roscoe Conkling in all save the little curl on his forehead.

Dr. Northrup was the first President of the Society, and is one of the most popular men in the profession.

Dr. Lord, of New York, looks like Chief Justice L. Q. C. Lamar.

Dr. E. C. King, a young, blond mustached dentist, and the pet of Philadelphia, has earned the title of "King of Implantation."

Dr. W. H. Atkinson, of New York, is called the Father of Dentistry, and looks like Longfellow. Last evening when delivering his address, Dr. Atkinson took off his coat, kissed his hand to his audience, and waded into a big paper on Pyorrhea Alveolaris, which he illustrated with a map of Hoboken.

Taken altogether the anniversary meeting was a big success. The attendance was very large last night, but much of it was due to Mr. C. G. Crowley, the practical joker and confidential friend of every dentist in the country. Mr. Crowley stood at the door, and when ladies and gentlemen who were going to a party in another part of the building came up stairs Mr. Crowley gravely steered them into the Dentists' Society meeting. All the visiting dentists have gone home except the Jerseyites. They couldn't.

SHALL THE PRECEPTOR BE ABOLISHED?

DR. F. W. SAGE, CINCINNATI.

The opportunities afforded the student attached to the office of a dentist in active practice for observing the effects of time and wear on fillings, artificial plates, treatment, etc., form no inconsiderable part of his training for successfully carrying on a practice for himself.

Presupposing the preceptor is well qualified and skilful, it would appear that the student who closely observes and appropriates to himself the results of his senior's experience and judgment must enjoy an important advantage over another whose only opportunities for learning have been confined to his two terms in a dental college. Yet some have questioned whether, of two students of equal intelligence, the one having spent years in an office while the other has only a theoretical knowledge of dentistry, the advantages are not about equally balanced when they come to enter college. The argument adduced is that the former must unlearn what is antiquated or objectionable in methods of practice, while the latter, being free from prejudices and preconceptions, is in a better condition of receptivity. But whence does the former derive antiquated or objectionable ideas if not from his preceptor? If the argument is applicable to the student, it serves further to show that many preceptors also need to be disabused of false ideas, which is freely conceded. The argument, if carried out to its ultimate conclusions, proves too much. It becomes derogatory to the

intelligence and competence of preceptors without inquiring whether they are college graduates. It does not and cannot establish the superiority of the training afforded by the dental college alone over that afforded by the dental college course preceded by a preceptorship. Taking a common-sense view, a student who has had free opportunity to study methods and results, as exemplified in the work of his preceptor, must be admitted to have an important advantage over another student who has not enjoyed such opportunity. He will be more likely to accurately forecast the outcome of his ministrations than will the other. He will regard the question of practical utility and serviceableness, rather than of showy effect, by which another, who has not even a borrowed experience to consult, may be unconsciously misled.

With all our vaunted progress as a profession, it must be confessed that history repeats itself in dental science and art, as elsewhere. We revert to the past, and even revive old ideas and methods, in part or wholly. An undercurrent of protest against the rejection of ideas and methods once universally popular, and the adoption of other ideas and methods deemed more worthy, sweeps silent and unseen about the foundations of the towering fabric erected in the name of progress and improvement. It is the conservative element, the influence of which is preserved in traditions, not to any considerable extent on the printed page.

The student who has been brought into living contact with the past, through the medium of a preceptor, is better qualified to judge of the worth of what is new and unique than another who has no knowledge of absolute methods other than what he gleans from references in his text-books. The value of instruction is fully developed only by repetition on repetition. A sentence descriptive of some single step in a given process may be perfectly intelligible when read out of the text-book, and yet, when it comes to its practical application, it becomes an enigma. The text-book indeed often becomes a snare to one who, for the lack of practical experience, is unable to discriminate between the requirements of two cases which, to the unpracticed eye, appear quite similar, but which are wholly dissimilar to another of more experience. One of the important prerequisites to the acquirement of useful knowledge is a distinct conception of what we need to know. This as regards technical knowledge at least. No student is competent to compare opinions of different authors of standard works in such a way as to reconcile what may appear to be discrepancies, or to draw his own reasonable conclusions where authorities disagree, unless he has considerable previous knowledge derived from his own observations and inquiries. Knowledge is, of course, not always wisdom; at the same time it is not apparent that knowledge

which includes even much that is erroneous is worse than no knowledge at all. The student in college is in the most desirable position to seek confirmation of what his judgment approved before he entered college, and to test what he regards as doubtful in his previous store of knowledge. He is more likely to grasp the special significance of many things which would otherwise pass unnoticed. It is a familiar saying that a man knows more after five years' practice in a profession than after twenty years. This we take to mean that the professional man knows better what he doesn't know at the end of the latter term. The chances are that he has really attained his highest measure of usefulness when he has fairly awakened to the discovery that he cannot promise much. If the epoch which marks this new era in the professional man's career may be attained at an earlier period, by virtue of three or four years' pupilage in the office of a senior, so much the more should the preceptor be held in our esteem.— *Ohio Journal*.

SOME SEASONABLE HINTS ON CLOTHING

One of the most common faults of our northern people is wearing an excess of clothing. One has only to look about him to note ladies, even at this early season, wrapped in furs, plush cloaks and other thick coverings, while any number of men are to be seen with overcoats sufficiently heavy to protect them from the severest cold in winter. To thus early become accustomed to such clothing is, of course, unwise in the extreme, and many must eventually pay the penalty of the habit. "Leave off your winter clothes late in the spring and put them on early in the autumn" is a wise injunction, but it must not be literally rendered. One should not, of course, thus early assume throughout his heaviest clothing, but the change should be made gradually. To put on warm under flannels early in the autumn is a sensible rule for all to follow. Equally as good a rule is to wear the fall overcoat as late as one can and be comfortable. Rather than trust entirely to clothing to keep warm, we should depend much upon exercise, and if too heavy wraps or overcoats are worn, that cannot be taken in sufficient amount to maintain good health, or when indulged in, the body is liable to become overheated, and a "cold" is generally the consequence. A very common error with men, oftener than women, is to wear, even in the coldest weather, too heavy outer clothing. Men generally select thick beaver and similar overcoats; and not a few prefer to have them made in the form of "ulsters," and thereby senselessly burden themselves with much additional weight. Such a garment also seriously interferes with walking and the long skirts are but little protection against cold, except in riding; certainly not sufficient to compensate for the inconvenience.

Two thicknesses of clothing are always warmer than one equal in thickness to, or even thicker than, the two combined. With this fact all are familiar, and if they would take advantage of it in constructing winter garments the benefit would be considerable. A light weight cloak or overcoat lined with several thicknesses of flannel will be amply warm enough, except when one is riding long distances and exposed to a piercing wind; then, of course, an extra wrap, a shawl or cape is needed. Some women wear skirts made of felt, or similar compressed and compact material. They are highly objectionable, by reason of great weight, and, again, they are less protection against cold than lighter fabrics or more open texture. Instead of one or more thick, heavy skirts, several lighter ones should be worn, and they will be found not only far more comfortable, but free from the evils which generally follow the use of the heavy garment.

Not only should the clothing be as light as comfort will permit, but it should be large enough to allow every movement of the body to be made with ease. This rule applies alike to men and women. What is considered a well-fitting coat is very generally "too tight across the chest," and, therefore, it interferes with breathing, or at least prevents deep inflation of the lungs. Some people may not know that when exposed to severe cold a feeling of warmth is really created by repeatedly filling the lungs to their utmost in this manner: Throw the shoulders well back and hold the head well up, inflate the lungs slowly, the air entering entirely through the nose. When the lungs are completely filled, hold the breath for ten seconds or longer, and then expire it quickly through the mouth. After repeating this exercise while one is "chilly," a feeling of warmth will be felt over the entire body, and even to the feet and hands. It is important for all to practice this exercise many times each day, and especially when in the open air. If the habit ever becomes universal, then consumption and many other diseases will rarely, if ever, be heard of. Not only while practising the "breathing exercise" must the clothing be loose over the chest, but beginners will do well to remember, in having their clothing fitted, to allow for the permanent expansion of the chest of one, two and even three inches, which will eventually follow.

Some impurities are thrown out of the system by the skin, as others are by the lungs, the bowels and the kidneys. It is absolutely essential to health that the emanations from the skin should pass easily through the clothing. This "transpiration" may be interfered with by an excess of clothing, or by clothing of a very close texture. All who wear India-rubber coats know how uncomfortable they become after they have been on for a short time. On the accession of Leo X. to the papacy, there was a grand procession at Florence in his honor. A little girl

was made to personate the golden age, by being coated, from head to foot, with gold leaf. Before the day was over, she died in convulsions, killed because "transpiration," or in other words, because carbonic acid gas, and dead, worn out matter, which should have been thrown out by her skin, were shut up in her system by the metallic covering. Ordinary clothing will not, of course, prevent transpiration, but an excess will interfere with it; and where too much clothing is worn the same soon becomes foul, unless the outside air can freely mingle with the gasses from the body and so dilute them. Some wear the thickest and heaviest undervests which they can buy, and such people are very generally the victims of frequent colds. Following the rule of light clothing they would be much safer from the dangers of exposure were they to wear two light undervests instead of one very thick and heavy. Some advocate that the inner undervest should be of cotton and the outer of woollen. They are, as a rule, well sustained; still there are some people who are subject to rheumatism and certain other difficulties, especially of the kidneys, who do well to always wear woollen next to the skin "the year around."

A word about cold feet, of which very many complain, and such people almost invariable suffer from indigestion and other derangements. An abbreviation of one of the ancient laws of health is "head cool and feet warm." An observance of this is certainly one of the primary essentials. If a person wears woollen stockings, as all ought to in the winter, most common cause of cold feet is from sweating, and it is the consequence of wearing shoes which are too tightly closed around the ankles. While the walking permits them to do so, people suffering from this trouble should wear low shoes and top gaiters. In very inclement weather, arctics, worn over cloth shoes, are the best for them; when their feet are so dressed, they can walk in snow for hours without feeling the cold in the slightest degree. It ought to be unnecessary to add that a person should never go to bed with cold feet, for sleeplessness is one of the common consequences. Those who can bear it safely should, before retiring, immerse their feet in cold water for a moment, and then rub them briskly with a coarse towel till they are warm. For those in whom circulation is deficient, a hot brick or flat-iron, wrapted in flannel, is often essential, and should always be placed in the bed when needed.

In every heated room a thermometer is needed and should be carefully watched. 70 degrees of heat is all that any person needs who is comparatively well, and very many invalids would be far better if they never subjected themselves to a higher temperature. If one remains long in an overheated room he is quite certain to take cold when he goes out, unless he walks briskly till he has become accustomed to the change.

Theatres, churches, etc., in the first place, and personal neglect in the second place, are accountable for many colds, sore throats, bronchial inflammation, etc. Such places are quite certain to be overheated and poorly ventilated, and people, especially ladies, are disinclined to remove their wraps. On leaving they enter a car or carriage and reach home shivering with cold.

We find in neck-wraps a common cause of "colds." If during winter one was certain to wear much the same wrap at all times when in the open air, there would be less danger from it. But the chances are that on some occasions when it should be worn it will be left off, either purposely or forgotten, and a cold is the result. The silk handkerchiefs with which many men adorn themselves cause more sore throats than any other influence. When once put on, the wearers are wedded to them for the remainder of the winter. The coat collar is ample protection when turned up and buttoned closely, and a man is very foolish to use any other means for the purpose. To attempt to criticize ladies' apparel, or at least that part of it worn about the neck, is beyond us, and we will merely leave them to draw conclusions from the advice which we give the men. There is another rule for the latter to observe. Always wear throughout cold weather the same style of collar, and be sure and have your shirts "cut high in the neck." If you wear a "dickey" to-day and a "turn-down" to-morrow you are in for a sore throat, or something of that sort, the next day. No less important is it to wear continuously the same style of necktie.

Physicians are frequently asked if they recommend "chest protectors." They certainly should be worn if they will add to the comfort of the wearer. If a person has his vest "cut high," wears a broad necktie, has on warm flannels, and is otherwise properly dressed for winter, he will scarcely need a "chest protector," unless he suffers from some bronchial or pulmonary affection; in which one should be worn. In our climate, the so-called catarrhal troubles are very common; we refer especially to catarrh of the nose and throat. People who suffer from them take cold very easily, and are "stuffed up" after every trifling exposure. Such people should, of course, follow all the rules of health; but there is one which may be emphasized to meet their needs. Every morning on rising they should sponge the face, neck and uppermost part, at least, of the chest with water as cold as it runs from the faucet. The habit, if kept up, will not only save them many a cold, but will really help much in the treatment of their catarrh.

We must "toughen" ourselves to endure cold. We should depend more on exercise and less on clothing to keep our bodies warm. The clothing should be the lightest compatible with comfort. Cold sponge bathing, or the air bath, is essential to the health of all who can properly employ either. We, as a rule, need less heat in our houses and better ventilation. Personal care and the application of a little common sense "fill out the measure."—*Hall's Journal of Health.*

TIN AND GOLD.

DR. J. G. MOODY, MENDOTA, ILL.

For a number of years many dentists have been using a combination of tin and gold at the cervical margin. It answers a very good purpose and has many things to commend it. It is best prepared in the following manner: Lay a half sheet No. 4 soft gold on a half sheet of No. 4 tin. Fold over into narrow strips, or, better yet, roll in a napkin loosely, then cut into required lengths. The real value of the tin I believe to be rather as a matrix for the gold than any supposed antiseptic or therapeutic qualities. That it may exhibit these qualities at times is, however, beyond question.

Tin alone becomes darker, and is more apt to wear away or disintegrate than is tin and gold combined. All who have worked with tin and gold much, know that a change in the material does often occur. The surface will become harsh and gritty, much like a soft amalgam.

By increasing the proportion of gold you can increase the hardness to any desired degree. Tin and gold cannot be annealed, neither can it be worked with foot pluggers, as can gold. Deeply serrated, broad and thin pluggers are the best. The pieces are forced into each other by the sharp plugger, and these commingled points are further interlocked by the subsequent malleting. Sometimes this filling material can be built up into a solid mass, but as a rule this is neither desirable nor admissible.

I believe the majority of dentists can produce better results by using tin and gold at the cervical margin of all teeth posterior to the cuspids, than by using gold alone. The same principle seems to be involved as in using the combination of amalgam and gold. For a cavity that is much below the gum the best plan is to fill to the desired extent with tin and gold, mallet hard, finish off finally, then complete with gold. Gold can easily be built on to the tin and gold, but it requires care. Lay a thin pellet of foil on the tin, hold one end down with an instrument, and, beginning at the other end, with a deeply serrated plugger drive it into the tin. Annealed gold is best.

There is something about tin that renders it peculiarly adapted to this work. It will lie in place better even than soft gold. It will not curl up under the pressure of the instrument as much as gold, and being so soft is easily worked. By reason of these qualities the tin and gold can be worked more rapidly than can gold alone. Its wearing qualities when in a crown cavity are nearly equal to gold. It is especially useful in soft, chalky teeth, and the teeth of children. It may be abused; too much may be expected of it, but I believe it will prove to be a valuable filling material.—*Dental Review*.

GOLD AND AMALGAM IN THE SAME TOOTH.

DR. C. P. PENYN, CHICAGO.

Shall we ever use amalgam and gold in the same tooth, and if so, why? and if not, why not? There has been such varied teaching in the past in regard to this subject, that it is time the old errors should be exploded and scientific teaching presented to our students of to-day. The old way was to put both amalgam and gold in the same tooth if it seemed necessary, but never let them touch each other, or grave results would follow. After seeing such methods pursued we find that in spite of the teachings, grave results did follow, which resulted in the loss of the gold filling, while the amalgam remained comparatively sound, or rather, the tooth structure surrounding the amalgam filling.

Therefore we found, first from unpleasant experience, and later from theory, that if amalgam and gold are placed in the same tooth, they should have an uninterrupted communication.

We have found that if the two metals touch in the electric battery there is no longer a current, it is dead, no shock is produced, and it is just the same when the metals are in the tooth in the presence of an acid, as it is out of the mouth in the laboratory.

Having learned this simple lesson in electrical chemistry, after many years of patient struggling, we find that we can make use of it very often in our work on the human teeth. To cite a case. Patient presents with mouth full of gold—as we often say when meaning that there are a number of large gold fillings; upper molars nicely filled; lower second molar has lost a large gold filling; buccal mesial and distal walls are broken down; patient cannot bear the physical or financial strain to refill with gold; and, indeed, you do not think it would pay to put your patient to such an ordeal when the chances of further failure are so great. So you fill with amalgam at a venture, and when the rubber dam is removed and the acid saliva comes in contact with the teeth as they are closed, a very perceptible shock is manifest, and you dry off the newly filled tooth, put on a coating of chloro-percha or some other impervious varnish to protect temporarily and save further shock. Then the next day, or very soon thereafter, you drill into the amalgam filling and insert in the cavity thus made a gold filling, when all goes as merry as a marriage bell. And why, do you ask? because you have removed the *casus belli*, or rendered inert the metals which caused the electricity to be generated; and such a tooth, filled in such a manner, will resist the further encroachment of caries better than if filled with gold; but the amalgam will discolor badly, while the gold will remain bright and clear.—*Dental Review*.

IMMEDIATE ROOT FILLING.

DR. LOUIS OTTOFY, CHICAGO.

Any tooth is the proper one for the operation, but free access to all roots should first be obtained, for thorough cleanliness and dryness are all important factors. The rubber dam should be adjusted, the *debris* entirely removed from the cavity before any attempt is made to enter the pulp-chamber, the root canals, once opened, they should never be bored or reamed, nor should any attempt be made to enlarge them; but instead a good supply of very fine piano-wire instruments should be provided. The first step consists in saturating the entire tooth and cavity with a solution of bichloride of mercury, one part to one thousand of water; then follows the thorough cleansing of the canals with cotton wound on broaches and dipt in chloroform or ether, the object being to dissolve and remove the fats and foreign substances by the aid of these volatile agents. Only very few hairs of cotton should be used, thus preventing a pumping or forcing action toward the end of the root.

These washings should be continued assiduously till neither odor or color is perceptible. However, in roots where the apex is large (a fact easily determined by the experienced hand), the cotton receives a slight yellowish tinge, which does not cease, and is no bar in proceeding with the treatment.

After thorough cleansing, a solution of bichloride of mercury, one part in two hundred and fifty parts of water, is introduced into the root, but not forced beyond the apex. This having been allowed to remain two or three minutes, it is completely removed, one part of the bichloride of mercury, in one thousand parts of water, is forced into the root and beyond the apex. The root canal is then thoroughly dried, and peroxide of hydrogen is allowed to take its place; this, also, should be pumped with a piston-shaped piece of cotton into every available space within the root and beyond it. If any pus is present, and its presence is indicated by the peroxide of hydrogen, the bichloride of mercury, one in a thousand of water, should again be used; but if no pus is present, its use may be dispensed with. The root-canals are now carefully dried with hot air, and medicated by winding cotton on a broach, moistening it with eucalyptol, and dipping it into iodoform; this is forced thoroughly into the roots. While in this condition, gutta-percha dissolved in chloroform is introduced. Instead of the gutta-percha cones I have been in the habit of making cones of oxyphosphate of zinc, and forcing them into the canals in a semi-hardened condition (either may be used), and acting as a piston, the soft gutta-percha should be forced by the cone, thoroughly driving it into every space, irrespective of the fact of its passing through the apex of the root. A

filling of gold (if not too large a cavity) may be immediately proceeded with. Any of the plastics may, almost invariably, be introduced at once.

The application of a counter-irritant to the gums is then indicated, which may be either a mixture of equal parts of tincture of iodine and tincture of aconite root, or an iodine paint, which is iodine dissolved in alcohol, four times the strength of the officinal preparation. That either may prove effective, the tissue to which it is applied must be dry. The patient is instructed to return within twenty-four hours if in trouble. Generally, inflammation, sometimes severe, for three or or four hours, will follow the treatment. When this treatment is successful, it does not differ in any way from a tooth treated in the usual manner; and, I believe, the liability of recurrence of disease is not more probable than in those subjected to a prolonged course of medication. In a few of my earlier experiences the treatment proved unsuccessful, the patient returning the following day, with the usual symptoms accompanying the filling of the alveolar abscess, but, by careful observance of the principles herein laid down, general success follows. While not recommending the method for universal practice, all practitioners will find many cases in which it is impossible to continue, or even undertake, the treatment of a diseased tooth, or when, from any reason, the operation must be done immediately, the tooth lost or its treatment entirely abandoned; in these cases, certainly, an attempt to thus save the tooth would be entirely justified.

The following precautions should be observed, *invariably* :

1st. Do not select patients of lymphatic, enemic, or otherwise sluggish constitutions, but robust, healthy persons. 2d. Use none but absolutely pure and reliable remedies. 3d. Perform each step thoroughly before another is taken.

It requires from one-half to one and one-half hours to properly perform such treatment.—*Dental Review*.

A RECEIPT FOR A GENIUS.

Take a number of sound, strong, powerful stocks, endowed with unusual energy and application, but varying in personal characteristics, and include among them a considerable number of races, dispositions, and temperaments. Mix, by marriage, to the proper consistency; educate the offspring liberally, broadly, and diversely; let these again intermarry with other similarly produced, but individually dissimilar idiosyncrasies; and look for a genius in the fourth or fifth generation. Among a resultant of five hundred persons, we may expect a majority of average fools, a minority of modest mediocrities, a few able people, and—if he lives—perhaps one genius.—L. L., in *Med. World*.

FILLING WITH GOLD.

DR. A. H. THOMPSON, TOPEKA.

We employ the first layers unannealed, and press well into the cervical grooves of proximal cavities or the posterior points of other cavities, and condense with small points with little force by a heavy mallet. Foil is then annealed, attached, and condensed in thin layers, well worked over. Small cylinders, or pieces torn from larger layers, are then condensed in the same way, to build up the bulk of the filling, the margins being carried up with the semi-cohesive foil. Large cylinders are condensed on the outer surface with larger points to give a finishing surface, as the small points might make the filling pitted. But in no part of the process of condensation should *much* force be used. Gold is too often introduced in such large pieces that great force is required to condense it, and with a doubt as to this being thoroughly packed or the pieces being well welded. Often flaking of the gold is a result of using large pieces and imperfect malleting. The safe plan is to work it on in small pieces with small points and light blows. The tooth is spared the jar and strain, cracking of the enamel is avoided from the forced expansion of the filling, and in working, the touch is a complete guide as to condensation.

After the filling is introduced, it should be well burnished with strips, tapes, disks, stones, and polishing-powders. The gold should be frequently burnished during the process of finishing to eradicate all irregularities, and a fine burnish should be left on it at the last, that food may not lodge on it. But in exposed places this burnished surface should be frosted with pumice, to give a dead, unreflecting surface. The platina and gold combination makes a harder surface than gold alone, and should be used on the edges of incisors and the cusps of cuspids and bicuspid, *i. e.*, for all "shoeing" of the worn ends of teeth. It promised well at first, as furnishing a gray finish for exposed surfaces of fillings; but patients object to having "tin teeth," as they call them, so that they will rarely consent to its use in visible locations, preferring the pure gold.

In proximal cavities of the bicuspid and molars it is our custom to line the cervical margins with a good layer of tin foil. This is accomplished by flattening a tin cylinder of the proper size, and cutting a proper length off from it, which is condensed flat against the cervical border. A long experience with this method has demonstrated that it is good practice. The therapeutical qualities of tin, its oxidation and hardening of the dentos at that place, and its combination with the gold, makes the filling more durable at the most vulnerable point of proximal fillings—the cervical edge. It makes a better

joint than soft gold, is a better preserver of tooth-substance, and experience has abundantly testified to the value of this expedient.

For filling with amalgam, the cavity need not be so strongly shaped, nor be made so directly accessible, and the overhangs need not be cut away so much. But there is much to be learned yet to make good edges; for, though amalgam fillings last well, the edges do not remain sight, and will finally leak. The filling should be polished well after it hardens,—the next day, or as soon thereafter as possible, for many failures with this material are caused by the neglect of this rule. Protrusions of the filling at the cervical border, as waste pieces floating back and becoming attached to the filling, make irritating points which cause inflammation of the gum-margin, or catch and retain food and débris, the decomposition of which leads to recurrence of the disease about the filling. Besides, the filling cannot be finished nor polished till it has become hardened, and no good workman will let his work go unfinished.—*Cosmos*.

HEREDITY.

DR. S. D. ROBERTSON, CHICAGO.

The cause of resemblance in offspring to parents and ancestors has been made a subject of careful study by scientific men.

The most recent theory adopted, and the one which presents the most plausible hypothesis, is that known as the doctrine of "Pangene-sis." This is the technical name for Darwin's theory of variation in animals and plants under domestic cultivation.

It is a well known fact to physiologists that every part of the living body is made up of cellular elements which have the power to reproduce their kind in the individual, thus repairing the loss resulting from waste, be that from disease or injury. Each cell produces cells like itself. It is also known that there are formed in the body numerous central points of growth termed "nuclei." In every group of cells is formed one of these central cells (or nucleolus) from which the others originated and which determines the form of their growth.

Dr. Kellogg cites as an illustration of this fact an experiment in which the spur of a cock was grafted on the ear of an ox, which lived and thrived in this somewhat novel situation for eight years, growing to the length of 9 inches and weighing nearly a pound. A tooth has been made to grow on a rooster's comb in a similar manner. The tail of a pig has been transplanted from its normal position to the back of the animal and retained its sensibility.

The theory of pangenesis supposes that these centers of nutrition form and throw off not only cells like themselves, but very minute

granules called gemmules, each of which is capable under suitable circumstances of developing into a cell like its parent.

These minute granules are distributed throughout the system in great numbers. The essential organs of generation perform the task of collecting gemmules, and forming them into sets, each of which constitutes a reproductive element, and contains in a rudimentary form a representation of every part of the individual including the most minute peculiarities. It is supposed from this that each ovum or egg contains not only the gemmules necessary to reproduce the individuals who produce, but also a number of gemmules which have been transmitted from the individual progenitors.

If this theory be true it is easy to understand all the problems of heredity.

It will be seen then that zoosperm actually contains in an embryonic form every organ and tissue of the individual producing it; the same may also be said of the ovum.

In other words the reproductive elements are complete representatives in miniature of the parents, and contain the same peculiarities, the same eccentricities, the same diseases and natural deformities as the parents.

Various modifying circumstances are sufficient to explain the seeming and also the real dissimilarities between parents and children.

—*Dental Register*.

FAMILY DENTAL PECULIARITIES.

DR. GEORGE W. KEELY, OXFORD, OHIO.

“There is an ingrafted tendency in all living organized matter to reproduce itself.”

We find this the case in considering the causes that result in a crowded and abnormal condition of the teeth in many families—the troubles being directly traceable to inheritance, and are consequently transmitted peculiarities.

In the teeth of most families variable individuality can be seen, particularly as to size, texture, color and form, and the departures from the normal type are very often transmitted to their successors. We have often recognized different members of families on examining their teeth and observing the family type. We have known large families where, in almost every member, we found the V-shaped dental arch generally narrow in the region of the bicusps, with the anterior teeth piled one on the other, giving the features a disagreeable and unnatural appearance, making correct enunciation difficult, as though an imperfectly fitting dental-plate was being tolerated in the mouth. And it is supposed all such cases are of a congenital origin.

We have a young lady patient who is minus the right superior lateral. In her father's mouth we found two perfectly formed laterals on the same side. By some freak of nature the offspring was deprived of this tooth, yet the complement was in the family. In another case the father is minus the superior laterals, as also are six of his children, while the seventh has a deformed right lateral, much like a supernumerary tooth. The father of another family has no superior laterals, one son has but one, the two daughters have the complement, the teeth of all being in line. In another family, one daughter retained her temporary cuspids till she was twenty-eight, when both the permanent appeared inside the arch. Another, aged twenty-two, had the right cuspid in place, and retained the left temporary, while the permanent one was just appearing inside the arch. The arches of both were well developed. This same peculiarity had appeared repeatedly in the mouths of their ancestors; and this seemed to be a transmitted family type.

In other cases this inherited type may be confined to a malposed central, lateral or cuspid, appearing in the offspring of a son or daughter, as the result of a law of nature which reproduces the same deformities as existed in one or more of their ancestors.

We have the model of the teeth of a lady aged twenty-six. Her eight upper front teeth close inside the lower ones, when the upper incisors are almost out of sight.

Her father had precisely the same deformity, as also his father and an aunt. The mother had well-formed dental arches, and a son (there being but the two children) had regular teeth, and normal arches like the mother.

This lady had three children. The oldest, a boy aged five, had the same deformity as the mother. The other two have regular teeth like the father.

We rarely ever find irregularities in the temporary teeth, have never seen more than five or six.—*Ohio Journal*.

Powwowing Aching Teeth.—A young man came into my office to have me look at a front tooth. After the examination I took a survey of his bicuspid and molars, and found some badly decayed ones. I said to him:

"You ought to have these filled."

Said he, "They will never ache."

"How did you have them treated?"

"I had them powwowed."

"How is that done?"

"A doctor stuck a stick in the cavities and said over some words that I did not understand, and told me they never would ache again."

Emporia, Kansas.

A. G. GRAY.

WHY DIDACTIC LECTURES?

[The following, which we take from the *Southern Dental Journal*, is as applicable to our Dental as to our Medical Colleges. In most colleges, even the conversational quizzing before each lecture, on the preceding lecture, is now omitted. Nor is the student required to compare the doctrines of the lecture with standard authors, so as intelligently to discuss the subject treated of. Under many lecturers he is not expected to have ideas of his own, wherever he may have obtained them. If he would "pass," he must reflect the views of his lecturer—to differ is death.—Ed. ITEMS.]

To the Editor of The Medical Record—Sir:—I am attending my third course of lectures at one of your best medical schools, and as examination time approaches I am filled, not with the febrile qualms appropriate to the season (for, judging by those who have preceded me, I don't see how I can help getting my degree), but, as I look back on my past three years of study, a question arises which perhaps your sagacity may help me to solve.

What is the real use of the *orthodox didactic lecture*? I have attended all religiously and taken notes, arguing in this way: If the lectures are worth delivering they certainly are worth noting, while, if they are of no value, why do the professors have the effrontery to inflict them on us?

As my medical horizon widens, I begin to find that ninety-five per cent of the sapient lore that has dropted from the oracular lips of my teachers lies between the covers of a few easily obtained, moderately expensive, English and American books and periodicals. The remaining five per cent consists of (*a*) material too recent to have been incorporated in text-books (but, alas! the flavor of newness is not any too prominent in the average didactic lectures); (*b*) original ideas and methods (which my preceptor as often tells me are wrong as right, worthless as useful, and often designates as cranky); (*c*) flights of studied rhetoric (which are wasted on ordinary people like me); (*d*) jokes, of which most bear such indubitable marks of age that one can only infer that they antedate modern antisepsis. Is it fair to make me spend on the average five hours a day in an uncomfortable lecture-room, listening to the often monotonous reiteration of matters of written history, ninty-five per cent, to get five per cent of new facts, original ideas, oratory (*sic*) and musty *bons mots*?

Am I wrong in concluding that didactic lectures are relics of the dark ages, of times prior to the printing press?

I know that the influence of tradition is very strong among doctors, but it does not prevent them from throwing aside remedies which their predecessors considered invaluable, provided they find them worthless, or can get better ones. Why should it prevent them from giving up

methods of instruction which are irksome and adapted to an era of literature and science long past, and to an inferior class of students which, I trust, is fast becoming extinct?

Let me ask didactic lecturers two plain questions:

Do they continue the present plan because they consider it the best? Or are they actuated by the emoluments, pecuniary (direct or indirect) or honorary, of the position?

The first question I don't believe one in ten can answer in the affirmative. That one would say that he did consider didactic lectures, properly supplemented by laboratory and clinical work, the best method of teaching medicine—very well! Does he consider them now properly supplemented? If so, why is laboratory and clinical work so held in abeyance to, so crowded out and belittled by, didactic lectures? Ordinary people, like me, are very apt to value things by the amount of cash paid for them. What must be the relative value, then, we poor students put on clinics, which costs us nothing, laboratory work which costs us next to nothing, and didactic wind, which is forced on us at so many cents a litre? Why are clinical teachers paid next to nothing, and laboratory directors and assistances next to nothing, while the didactic cormorant soars above all with the "boodle?"

I am sure that few would answer the second question in the affirmative. They would say that the pecuniary return was insignificant, while the honor of the position was nearly empty.

Now, I know that the salaries of didactic lecturers are much cut down by the expense of maintaining the schools in which they teach, and I think that their net income is generally overestimated; but in the face of these facts I assert my belief, that there is not a didactic medical lecturer in New York City who does not receive, directly or indirectly, what he is satisfied to call at least a meagre pecuniary equivalent for his time and brains. It is not humanity that actuates him, nor an overweening conceit that unless the student gets second-hand wisdom from him alone the student will be a failure; it is not the love of lecturing nor faith in didactic methods; but it is because it adds to his bank-account (it may be hundreds, it may be thousands), and helps to keep the wolf from the door in one case, or to maintain an empty style or luxury in another.

Alas! thus are we students made to pay a big price to keep a poor practitioner from the almshouse, or to supply a successful one with an extra servant, a third horse, or a house on Murray Hill, that we students may get in a wasteful, antiquated and unappetizing way, a license to enter a profession for the practice of which we find ourselves, on graduating, utterly unfitted.

The remedy for this condition of things, it seems to me, is simple enough, but as it affects so many pockets it will be sometime before public opinion compels its enforcement. Take away the diploma-giving, licensing power of medical schools and invest it in our already appointed State Board of Medical Examiners, a body of signal ability and impartiality. Some medical schools would at once shut their doors (no public calamity), didactic lecturers would resign by the score, and those who did not would lecture to empty benches or give more for their money. They would soon find it expedient to lay out and supervise a proper course of reading for the students, supplemented by frequent examinations, where their newly collected data and original views could be intercalated, while their flowery rhetoric and jokes could be expended at the bedsides of hysterical patients.

Under this *regime* the now neglected clinical teacher and pathologist would come to the front and gather followers by the score. They could even charge fees, and in that way afford to devote more time and study to their work, and make their services much more valuable. The positions of laboratory director and assistants would at once become those of dignity, extreme responsibility, and, it is to be hoped, more lucrative than the present niggardly salaries render them. The buildings now largely devoted to spacious lecture-rooms should be gutted and entirely remodeled. There should be a large dissecting-room and one for operations on the cadaver, and *students'* laboratories for normal and pathological histology, chemistry, physiology, and materia medica, with a museum, consulting library, and reading-room. Let prescribed studies be taught by courses of reading, examinations at the bedside and in the autopsy-room, in the hospitals, and by allowing and encouraging clinical and pathological teachers to charge fees.

A MEDICAL STUDENT.

DR. WELCH:—Just had a blow up in my office, not three seconds before the top blew off, my head was directly over the top of the vulcanizer. I had reached over it for a bottle of medicine on a shelf back of it; just as I leaned back the top of the vulcanizer passed by my head. The stove blacking I had coated over the packing struck me in the face, making me resemble a negro; but fortunately I was not hurt though it played havoc with things in the office. Moral—look carefully after old machines.

G. H. HALE.

Saginaw, Mich.

The Minnesota State Board of Dental Examiners have issued a creditable report. It is not lengthy, but evidently gotten up with much care and accuracy.

NARROW ESCAPE.

Gas administered for dental purposes came near causing the death of a young girl at the Dental College, on College Street, yesterday afternoon. As it was the girl was unconscious for over three hours, and it was supposed that an overdose had been given and had resulted in death. The young lady who had the narrow escape was Miss Mamie Belking, twenty years old, who lives at 169 Pleasant Street. Yesterday being one of the free clinic days, Miss Belking and her sister visited the college. Miss Belking was suffering from a number of decayed teeth.

She was shown to the free dispensary. Shortly after two o'clock gas was given her and the student commenced to pull the teeth. After four had been extracted Miss Belking had regained semi-consciousness. Before more gas was administered another tooth was pulled. Just as the dentist extracted the tooth Miss Belking turned deathly pale and keeled over unconscious. Stimulants were administered to revive her, but they had no effect. She had no pulse, and her appearance was that of a dead woman. The students became thoroughly alarmed, and sent for Dr. Wm. Knight, one of the professors in the college. He hurried to the college, where he found the girl unconscious. He worked with her some time, but was unable to restore her to consciousness. Professor Knight, seeing that life was nearly extinct, sent for Dr. H. A. Smith, Dean of the Faculty. When the latter arrived both physicians worked for two hours trying to bring her to. About 6 o'clock she showed signs of life. They labored with her for a short time, and Miss Belking was finally revived. She appeared to be very weak. She was taken to her home in a buggy and had fully recovered last night.

The professors who revived Miss Belking say that the cause of her illness was not due to an overdose of gas, but by the extremely nervous condition of the patient, which is doubtless the fact.—*Cincinnati Enquirer* of Jan. 24.

[Where was the professor who is supposed to superintend the operations of these students?—ED. ITEMS.]

Conducting Dental Societies.—Dr. Garrett Newkerk has some good advice in the December *Dental Review*. First. Be sociable outside of the hours of session. The social features alone of your work may be worth all the time and effort put forth. Don't turn all the sociable work over to a few or to one or two men. Go into a committee of the whole on hearty, wholesome sociability.

If a stranger comes in, don't wait to be introduced. Maybe he is not known to any one, or the one who knows him may fail to introduce him. Don't have any "wall flowers." Go to the stranger and

learn who he is ; where he comes from, who his neighbors are ; tell him you are glad to see him, and let it be the truth. Introduce him, and make him have a good time, and tell him to bring his neighbors at the next meeting.

Second. Let no one be ambitious for office. Political wire-pulling is out of place in any scientific society. Let all the choices of an election be spontaneous.

Third. Never appoint a committee to nominate candidates. Elect by ballot, and let the first be informal, in order to get the leading expression of the members. Drop all but the two highest, elect one, and then make the choice heartily unanimous.

Fourth. Never grumble at the result of a majority vote. Assume that it is all right, whether it agrees with your judgment or not.. That is the only way to get along peaceably, even with yourself.

Fifth. Be strictly parliamentary as possible in all meetings, and in discussions be courteous, candid, kind ; all the more with those who are awkward and diffident.

Sixth. If you discover any one disposed to be ill-natured and censorious, be so good natured toward him, that he shall become the same. Good nature is contagious, as catching as the measles, and it is a good disinfectant, too, against nearly all the microbes of discord that lurk in the air where society work is going on.

A FUNNY ILLUSTRATION OF THE POWER OF THE IMAGINATION.

A short time since a man was taken to one of the Buffalo Hospitals suffering intense pain. He informed the doctors that his home was down in the country, and explained, as well as his bodily sufferings would permit, that he had swallowed his gold plate, containing four teeth, while asleep. From hour to hour he grew worse, and examinations failed to locate the swallowed article. When he had been in the hospital about four days, it was decided that, if relief did not come soon, it would be necessary to remove the foreign substance from his stomach with instruments. Finally, the man's sufferings were lessened considerably, and as a test it was decided to give him a little piece of beefsteak. This was done, and the poor patient was writhing in agony as soon as he had swallowed a mouthful. His sufferings increased to such a degree that he said he knew he would die if the operation were not performed at once. He described minutely the sensations he had experienced as he felt the plate slipping down his throat. Then, placing his hand on his stomach, he groaned forth : "I feel it right here now, doctor."

The physicians and nurses could hardly keep him in bed—he suffered so much. Preparations were now made for an operation, and,

just as the surgeon was about to commence, a telegram was placed in the patient's hand. He tore off the envelope and read aloud as follows: "Found teeth under bed. Come home."

His sufferings immediately ceased. He got up, dressed, and paid his bill. On leaving the hospital, this victim of an over-wrought imagination remarked that he could not, for the life of him, see what the doctors and nurses saw in his case to laugh at.—*Dental Advertiser*.

CLEAN THE CAVITY OF A CARIOUS TOOTH.

DR. A. H. THOMPSON, TOPEKA.

Cleaning the cavity of carious *teeth*, it is well to remove the most of the carious material before adjusting the rubber dam, that the patient may be required to endure the latter discomfort as brief a time as possible. The rubber dam is then applied, first punching holes for those teeth only which are to be exposed. It is slit between teeth which are very close with waxed floss silk. Where there is danger of its slipping off a bead tied in the ligature will help to hold it on, and this can be reinforced with cotton and sandarac. This is also a good expedient for accidental puncture. Where there is great difficulty in keeping the rubber dam on the back teeth the clamp is allowable; but, for ordinary places, it is an inexcusable barbarism.

Having adjusted the dam, and removed all the visible carious substance from the margins of the cavity, it should be bathed with carbolic acid, which, in addition to its antiseptic uses, will usually bring out the soft places by rendering them darker. But as this test cannot be relied on to reveal all the defects, it will be necessary to go over the margins well with a fine, keen excavator, feeling for the chalky places, which should be well burred out. The hard carious dentine is to be left in the direction of the pulp after having been well sterilized. If the pulp is nearly exposed, it should be covered with a piece of soft, porous paper, wet with carbolic acid, and over this thin phosphate cement is flowed. All cavities of depth should be filled with cement, and after hardening sufficient cut away to insert the durable filling proper. Where the pulp is approached, this cement will protect it from thermal changes and the force of filling. Where the wall is frail,—as in the anterior walls of proximal cavities in the incisors, or the buccal walls in bicuspid and molars,—the cement will support and give such walls strength, and preserve the tooth-substance where exposed to view. When cavities on the grinding surface of bicuspid and molars are deep, and the walls frail and shelving, it will protect and support them. Indeed, the uses of cements in deep portions of cavities are numerous, but judicious selection must be exercised, for the thinness of the walls and the quality of the teeth must be considered at all times.

"MULTUM IN PARVO."

DR. L. P. HASKELL, CHICAGO.

Dr. Talbot's new work on "Irregularities of the Teeth" is certainly entitled to the term, "much in little."

Here is a work of only 163 pages, including a copious index, finely illustrated (152 illustrations), large type, leaded, heavy paper, embodying all there is of real value to the student in the treatment of this subject. The author has shown himself to be a careful investigator of the anatomy and etiology of the subject, and thoroughly practical in the application of appliances, some of the best of which are his own design. It is to be regretted, however, that he has made no reference to Dr. Angle's system of appliances, the most recent, the most simple and effective, as a whole, that has been devised.

The fact that so much valuable information has been compressed into so small a volume is another reason why it is a model text book, and should be in the hands of all students.

Educating the People.—Dr. W. D. Dunlap, of Selma, Va., emphasizes the importance of knowledge of the true value of the teeth as a factor in health, and the duty of the dentist to instruct the people in the science of dental hygiene, because of the ignorance of the masses on this subject. Books should be prepared for use in the schools, with plain, practical hygienic rules. Teachers who look for clean faces and hands should also require clean teeth. The aid of legislators and school boards should also be invoked. In proof of the value of this method, he quoted from the United States census statistics, showing the number of school children in whom good habits in this regard might be formed. He also considers it the duty of professional men to go into the field and teach the importance of the little mill that prepares the material for the upbuilding of our bodies.

The futility of changing dressings in pulpless teeth, every other day, for the cure of alveolar abscess, with a fistulous outlet, was demonstrated by a patient who had been so treated for a whole year, the abscess being in the same condition, if not worse, after that lapse of time. Eugenol was injected through the roots, which came out at the opening, the roots were filled at once, and the case healed in ten days.—*Dental Review*.

Contour Operations.—Having faith in restoration of contour in fillings when properly done, and believing that such not only afford more real comfort to the patient, but will prove superior from a preservative standpoint, over a flat surfaced filling or separation, we offer the following suggestion, which we have found in practice to be quite

efficient, and to answer the purpose of facilitating the formation of a contour filling. We refer especially to operations with alloys, but the same principal is practical in gold operations and in combinations of gold and tin or alloys, assuming that the cavity has been properly prepared, and cavity walls cut away. A suitable matrix is carefully adjusted and shaped to admit of the proper restoration, we proceed to fill the cavity with alloy till that point is reached at which the point of contact or knuckle is desired; we here introduce a platina piece of proper length—one removed from an ordinary tooth,—the head of the pin being placed against the matrix, forming the desired contact. The pin extending well into the body of filling, the filling is then completed, matrix carefully removed, and the surplus filling material, if there be any, is trimmed away. It will be found in the subsequent finishing process—the pin being the most prominent portion of the filling, and harder than the alloy, will not be cut away so rapidly,—the point of contact will be more perfect. We suggest the platina tooth-pin as being readily obtained from useless teeth. Gold or platinum wire may also be utilized. We offer this simple suggestion for the benefit of any who may deem it worthy of a trial, believing the result obtained will prove quite satisfactory.

Altoona, Pa.

WM. B. MILLER.

WORTH HUNTING FOR.

Alluminum is worth \$12 per pound.

Gallium is worth \$3,250 per ounce.

Indium is worth \$150 per ounce.

Zirconium is worth \$240 per ounce.

Cause of Tooth Decay.—Dr. L. G. Noll, of Nashville, says: Food lodges around the gums and in the fissures and interstices of the teeth, which is capable of being manufactured into ferments, the lichen-like fungi described by microscopists in carious cavities, like the fungi of yeast and malt, being the growth of the catalytic substance, having no direct action on the tissues, but being the third party bringing about the mischief.

We give this month the portrait of Prof. G. Taft, editor of the *Dental Register*, one of the most prominent and useful men in our profession. It should have appeared as our first portrait, for he is the father of living dental editors; but we failed to obtain a sketch of his life. We failed again in February. Dr. Watt, whom we had depended on, finally writing us that he was physically incapacitated. We then fell back on the publishers of the *Register*, and now they fail us.

For Our Patients.

INCONSISTENCIES OF SPELLING.

A wandering tribe called the Siouxs,
Wear moccasins, having no shioux;
 They are made of buckskin,
 With the fleshy side in,
Embroidered with beads of light hicouxs.

When out on the war-path the Siouxs
March single file—never by twoux—
 And by blazing the trees
 Can return at their ease,
And thus through the forests ne'er lioux.

All the new-fashioned boats he eschioux,
And uses the birch-bark caniouxs;
 They are handy and light,
 And inverted at night,
Give shelter from storms and from dioux.

The principal food of the Siouxs
Is Indian maize, which they brioux,
 Or hominy make,
 Or mix in a cake,
And eat it with pork, as they chioux.

Now doesn't this spelling look cyiouxrious?
'Tis enough to make any one fyiouxrious!
 So a word to the wise!
 Pray our language revise
With orthography not so injiouxrious!

—CHARLES FOLLEN ADAMS.

OLD SPELLING.

O for a Booke and a shadie nooke,
 eyther in-a-doore or out;
With the grene leaves whisp'ring overhede,
 or the Streete cryes all about.
Where I. maie Reade all at my ease,
 both of the Newe and Olde;
For a jollie goode Booke whereon to looke,
 Is better to me than Golde.

—*Alonzo of Arragon.*

O blessed Letters! that combine in one
All ages past, and make one live with all.
By you we do confer with who are gone,
And the dead-living into council call.

THE IMPORTANCE OF DIETETICS.

Editorial in the Dietetic Gazette.

The prevention and treatment of disease by the administration of proper food, suggested itself to the earliest observers, and, in its simplest sense, certainly does not require a profound knowledge of either physiology or pathology to harmonize the idea with common sense and sound philosophy.

In the development of medicine the tendency has been to cultivate its allied branches without much regard to their mutual relations. We too often lose sight of the ultimate aim and intent of our calling—the cure of disease. The different departments have advanced on parallel instead of converging lines, and the result is that there is to-day a great accumulation of facts and theories, many of which are conflicting and confusing, and have little effect in alleviating human suffering; there is a vast gulf between pathological appearances and the remedial agent.

We are firmly of the opinion that many of the ailments common to humanity are due to errors in diet and faulty assimilation. Sir William Roberts aptly remarks, that the natural diet is a very simple and monotonous one, like that of cows and horses; and that, though by the process of evolution the digestive functions have, in a degree, kept up with the demand made on them by the concoctions of the progressive cook, they are yet a long way behind. Students of natural history are well aware of the modifications as to plumage, form, vigor, etc., which are brought about in birds and other animals by special articles of food.

Though the digestion of food is one of the simplest of animal functions, if interrupted or interfered with, the most harassing results follow. Man, in his present civilized condition, is a nervous specimen, and the digestive process, like all others, is under nerve control. The delicate mechanism by which the crude aliment is properly prepared for absorption and appropriation is, in our time, constantly subject to a storm of interference through mental and physical influences; we refer to worry and strain of the mind, and the ingestion of improperly selected cooked articles of diet, and the imbibition of unnatural beverages—beer, wine and spirits. It requires only a reference to these points to prove their significance.

The time has come for the profession to look more to their physiology. A thorough knowledge of this branch is much more helpful in a therapeutic way than some others which are pushed to the front, and which confer on their representatives a sad air of profound helplessness. In the light of recent investigations we know that, as a result of defective digestion, certain poisonous compounds called tomines

are developed in the alimentary canal, and, on being absorbed, are capable of producing varied and grave results. We are also in possession of sufficient data to confirm the belief that serious affections, such as rheumatism, gout, Bright's (?), scurvy, many skin diseases, and the hydra called dyspepsia, are caused by what and how we eat and drink.

Far be it from us to decry the judicious use of remedies. These must be employed, but till we thoroughly appreciate the influence of diet, and know how to regulate it and assist the digestive processes by appropriate measures, our treatment will be in vain.

SOMETHING FOR MOTHERS.

From Babyhood.—The variation in the period of incubation may be due to the nature of the epidemic or to the susceptibility of the patient. In most cases the sooner the disease is developed after exposure the severer will be the type of the attack :

Scarlet fever, 12 hours to 7 days.

Measles, 9 to 12 days.

Small-pox, 12 to 14 days.

Chicken-pox, 8 to 17 days.

Diphtheria, 2 to 8 days.

Whooping-cough, 4 to 14 days.

Mumps, 8 to 22 days.

If a child passes the longest time here stated, it will, with very few exceptions, escape the disease.

OUR BEST FRIENDS.

I have friends whose society is extremely agreeable to me; they are of all ages and of every country. They have distinguished themselves both in the cabinet and in the field, and obtained high honors for their knowledge of the sciences. It is easy to gain access to them; for they are always at my service, and I admit them to my company, and dismiss them from it whenever I please. They are never troublesome, but immediately answer every question I ask them. Some relate to me the events of past ages, while others reveal to me the secrets of nature. Some teach me how to live, and others how to die. Some, by their vivacity, drive away my cares and exhilarate my spirits, while others give fortitude to my mind, and teach me the important lesson how to restrain my desires, and to depend wholly on myself. They open to me, in short, the various avenues of all the arts and sciences, and upon their information I safely rely in all emergencies. In return for all these services, they only ask me to accommodate them with a convenient chamber in some corner of my humble habitation, where they may repose in peace.—*Francesco Petrarch.*

Editorial.

OVERCOMING DIFFICULTIES.

Every dentist is vexed with difficult work,—so difficult he would avoid it if he could. But it is forced on him, and the only way is to get through on the other side of it as best he can.

What a pity it is, we cannot have it all sunshine in this world—cannot choose our experience. And yet we are afraid it would be like those who are never suited with the weather. If they could have the ordering of it, it would be queer weather. The only way to have good weather is to see some special good in all its variety. And so in our experience in our profession. Every business has its sunshine and its clouds, its pleasures and its vexations, its easy work and its difficult work; we are inclined to believe this is best, after all, and that it is not a pity to have it so: it is necessary to our discipline and to our success.

We are confident that of all means for our own improvement nothing has been so efficient as difficult work, difficult people, and difficult situations. These have made the cold perspiration stand out on our forehead, made the head throb, strained to the utmost the nerves, the patience, and the temper—vexed us so we would escape them if we could, at almost any price, but, when conquered, they have proved the source of our greatest triumphs.

These things, of all experiences in life, are what tries our metal. If we meet them manfully and do our very best with them, we shall learn lessons by them we could not learn in any other way. They are the making of us, if we wrestle with them heroically and master them completely. They ruin us if we allow them to conquer us. We must not attempt to pass around them, nor try to shove them aside, nor do difficult work slightly, meet difficult people angrily, or allow difficult situations to engulf us. Difficulties must be waded through with a stout heart; difficult people must be met with cheerfulness, and difficult work must be done patiently, laboriously, thoroughly. Every such effort and success gives us valuable experience, mental and moral strength, and an enviable reputation.

In our earlier experience as a dentist, if there was any thing we sought with the greatest anxiety, it was to be able to do something our neighboring dentists did not attempt, and to have the reputation of loving difficult work, of pleasing difficult people, and of never being disheartened under difficult circumstances. This, of course, naturally brought us to the front; and by the increased and continually increasing intelligence and skill this *necessitated*, it kept us there.

"THOTS."

Dr. Dienelt wants to know why we keep at the head of our *Contents* THOTS FROM THE PROFESSION. "He thinks thoughts" much better both in appearance and accuracy. Well, if o is better represented by "ough" than by o, suppose we give our friend's letter with o represented in this way; for if "ough" better represents o in thoughts, is it not better thus to represent o in other words?

Dr. T. B. Welch:—Nought being a subscriber oughf your interesting and instructive ITEMS OUGHF INTEREST, I have perhaps no right to criticize; but I cannought refrain froughm taking exceptioughns to the use oughf your phonetic "thots."

This in your sectioughn oughf the country may coughver the ground perfectly; but we oughf the South pronounce thoughts (for which your "thots" doubtless is intended) thawts; and it therefore falls entirely shoughtt oughf its meaning in these parts. Had I nought been aware of the fact that you foughrmerly used the phonetic foughrm oughf spelling quite extensively, and had I nought foughrmerly lived in Philadelphia, I should have supposed that "thots" was a newly coined word foughr joughttings, tit bits, and the like; but should have never dreamed that "thoughts" was meant.

Therefore as each section oughf the country has its own way oughf pronouncing; spelling by sound foughr all sections is utterly out oughf the questioughn. So pray, brother Welch, put back the good old houghnest "thoughts" in the place oughf your new fangled "thots."

JULIUS DIENELT.

Suppose we now print this letter somewhat phonetically. We shall probably offend the eye (or rather custom) as much as by the above use of o, but is it not more sensible than ordinary spelling?

Dr. T. B. Welch:—Not being a subscriber ov ur interesting ITEMS OV INTEREST, I hav perhaps no rite to criticize, but I canot refrān from taking excepshunz to the use ov ur fonetic "thots."

This in ur secshun ov the cuntry ma cover the ground perfectly; but we ov the South pronouns "thoughts" (for which ur "thots" doutles iz intended) "thawts;" and it therfore falz entirly short ov its mēning in thēz parts. Had I not bin aware of the fact that u formerly ūzd the fonetic form qite extensivly, and had I not formerly livd in Filadelfia, I shud hav supōzd that "thots" waz a newly coind werd for jotingz, tit bits, and the like; but shud hav never drempt that "thoughts" waz ment.

Therfore, az ēch secshun ov our cuntry haz its ōn wa ov pronounsing; speling by sound for al secshunz iz uterly out ov the qestion. So pray, bruther Welch, just put bak the good old onest "thoughts" in the plās ov ur new fangld "thots." JULIUS DIENELT.

Manual Training.—We shall have better and more useful men and women when our children are taught to *do* as well as to *know*. It is a fine thing to charge their memory with facts; it is quite as essential to show them the practical application of those facts, and to give them the skill to make them a part of their life. There are facts in the equations of popular instruction that cannot be thus reduced; they may as well be eliminated from the problem of life. Time was (though thank God it is rapidly passing way) when much of the most precious years of a child's life were spent in learning the dead languages, and many other useless dead things. "O, it will strengthen their memory!" We shall have more symmetrically developed and better balanced intellects, and more practical, skilful, useful men and women, when *all* the faculties are strengthened, as well as the memory. Besides, if you would strengthen the memory, associate with every fact you give it some useful result. Association is the great strengthener of memory. Demonstration makes indelible, facts that are otherwise incomprehensible, or, if comprehended, are unappreciated and soon forgotten.

By all means, let us turn out from our schools boys and girls that can do something, that will be self-supporting.

The teachers of our children have a wonderful power in determining their bent, character and position in life; the philosophers and scientists in our great halls of learning, as they take these pliant minds under their training, sway an enviable influence; the gospel ministers are doing immeasurable good every way, everywhere. But we know of no more beautiful, practical, or efficient expounder of all that is elevating and noble in human knowledge and character, no more powerful magnet to draw men and women from darkness into light, to arouse them from lethargy into noble activity, to transform them from uselessness into usefulness in advancing the world's morals, intelligence and heavenliness, than a business man, purified, enthused and guided by human and divine love. It is in our ordinary sphere that we can best teach the value and beauty of goodness.

Caustic potash is an efficient obtundent, though somewhat painful on first application, which lasts but a moment.

PERHAPS the most valuable result of all education is the ability to make yourself do the thing you have to do when it ought to be done, whether you like it or not; it is the first lesson that ought to be learned, and however early a man's training begins, it is probably the last lesson he learns thoroughly.

THE THREE P'S.

As the beginner stumbles in his darkness, blunders in his awkwardness, and struggles in his weakness, discouragement will soon come without great *patience*.

His failures will be so numerous, the results of his attempts so often ridiculous, and his best efforts so clumsy, that he will certainly turn back if he does not have much *perseverance*.

When he thinks himself wise as a scholar, skilful as a workman, and strong in all the elements of success, he will find that some mistake in his general practice, some bad habit in his life, or some imprudence in his conduct, is fatal unless he has great *prudence*.

With these three ps—patience, perseverance, prudence—a man is pretty sure of winning. They will almost surely overcome the obstacles in his path; they will force a way to the treasure house of knowledge, to the drill room of skill, and to the hearts of the community; and they will impart the indispensable qualities of mental, moral, and physical training necessary to his ultimate triumph.

A Few Things which if Observed will give You Comfort and Profit.—*Avoid anger*, for we all know that the self-possessed man has the advantage of an angry man. Besides you are sure to say something when angry you must afterward repent of, and sometimes atone for.

Avoid envy, for it eats as does a canker, harming ourselves far worse than it can others. It is a mark of littleness, a hindrance to success, and a fruitful cause of unhappiness.

Avoid ostentation, for it is the advertisement of weakness, the evidence of vanity, and the ruin of the most prosperous business.

Avoid pride, for it repels friendship, invites criticism, and often makes you look ridiculous, when you think you are looking at your best.

Avoid jealousy, for it is a public acknowledgement of inferiority, a proclamation of your opponent's superiority, and a bundle of thistles you have gathered for your own bed.

Three bicuspids on the right side of the lower jaw was a phenomenon we saw in our office the other day. They were all equally perfect, one having come on the inside of the arch. The gentleman was about twenty-five years old.

A Blast at eight hundred degrees temperature will ignite charcoal, nine hundred degrees will ignite coke, and thirteen hundred degrees will ignite anthracite.

Tannin dissolved in Glycerin or alcohol is good for the dressing of an exposed aching nerve of a tooth. The cause of the pain is the congestion of the pulp, and its pressure against the unyielding walls of the cavity by its swelling. The tannin causes it to shrink. In a devitalized pulp tannin shrinks, dries, and mummifies the little shreds remaining after we have removed all we can. Often, if we can penetrate through the apex the abscess on a root, and inject a solution of tannin, the abscess shrinks and dies.

Wisconsin State Board of Dental Examiners.—Dr. Edgar Palmer, Eau Claire, Secretary of the Board, sends us this concise report, which must be of immediate importance to dentists of that State, and to those contemplating practice there. And such a codification of the law, practice and important information of the profession should be annually prepared in every State.

The St. Louis Dental Society, at the annual meeting, January 3d, elected the following officers for 1888:

President, Dr. Henry Fisher; Vice-President, Dr. J. Warren Wick; Corresponding Secretary, Dr. Wm. Conrad; Recording Secretary, Dr. J. H. Spalding; Treasurer, Dr. A. J. Presser; Committee on Ethics and Elections, Drs. J. B. Newby, Geo. P. Holmes, W. N. Morrison; Publication Committee, Drs. A. H. Fuller, W. H. Eames, G. A. Bowman.

WM. CONRAD,

Hotel Beers.

Corres. Sec'y.

No man can successfully conduct a profession on any other than strictly business principles. Promptness in collecting and in paying bills, faithful service, perseverance and energy, are as indispensable requisites to the professional man as to the business man. Lack of system means growing embarrassments, failure of resources, and subservience to petty cares, which leave no room for growth and improvement.

One of the prerequisites for dental success depends on truthfulness with children. A child understands as well as most adults when the truth is spoken, especially in conversations pertaining to themselves; and, for the benefit of your future practice, never deal in misrepresentations. The truth will answer a much better purpose.

Many a great mind has moved slowly and clumsily in youth, but when once fairly underway, has asserted itself with extraordinary power. The moral to this is find out some study that you like, and force your mind to stick to it till it gets the habit of continuous application.

Miscellaneous.

SPELING REFORM IN ENGLAND.—DEPUTASHUN TO THE BRITISH GOVERNMENT.

Sumtime sins a number ov distinguisht English gentlmen cald on Guvernment ofshals to plēd for speling reform. The fōlōing iz the account ov the mēting :

The object ov the deputashun woz to urj on the Guvernment the dezirability ov apointing a Royal Comishun to inqir into the subject ov English speling, with a vew to reform it, in the interests ov educashun. The deputashun, which woz introdūst by Ser Charles Reed, comprizd a larj number ov persnz interested in the werk ov educashun.

Ser Charles Reed, charman ov the London Scool Bord, sed that sum time ago the Scool Bord ov London past a rezolushun on the subject ov speling reform, and recomended that an attempt be made to simplify the existing methud. At the present time, 131 bording schoolz thruout the cuntry had givn a practical asent to the rezolushun, while 69 had sind a memorial on the subject. The conferens resently held at the Sosiety ov Arts had also aprovd ov the sugestiu. The deputashun on that da simply askt for an inquiry, and tha did not intend to discus eny sistem. Tha mērlly askt that, taking into considerashun the grāt wāt ov the apēl, and the gravity ov the qestiun brot before them, a comishun shūd be granted. The qestiun afected not only England, but al thōz cuntriz whar the English languaj woz spokn. Tha had brot the qestiun before the department az wun ov finans, for no dout it wud be an imens sāving to taxpāerz.

Dr. Gladstone sed that in comparing the progres ov children in England with the progres ov children in sum continental cuntriz, it woz not in favor ov England; and this he ascribd to the irregularitiz ov our speling. If ther woz a reform in this direcshun it wud be a saving ov time and muny; and he sertnly thōt public atenshun shud be cald to the subject.

Dr. Angus urjd on the Guvernment to take up this inquiry. The educashun ov the cuntry woz largely provided for by the taxez and by the Trezury; but he thot that, cud the sistem ov speling be more simplifid, ther wud be a grāt saving. In the interests of the taxpāerz—espesahly the werking clasez—he thot it woz hily dezirabl that a comishun shud be apointed to inqir whether enything cud be dun to diminish the enormus artifishal condishunz which exist under the prezent methud ov speling. Within the last ten yērz the Guvernment had bin the grāt examining body ov the kingdum, not only in the Sivil Servis, but in the public departments. Every yēr the Guvernment departments examind wun thousandfold more children than the uther examining bodiz ov the kingdum. Therefore it woz the asistans ov the Guvernment tha now reqird. In point ov fact, whotever rulz the Guvernment lād down, tha wud ultimately rule everywhar. He trusted this reform wud be granted to practical educashunists. Tha did not advocate eny particular theory, but tha did not wont the speling ov werdz to interfēr with the acqizishun ov nolej. In the interests ov al clasez, he thot it woz a smal thing to ask the Guvernment to grant a comishun ov inquiry.

Mr. Rathbone, M. P., on behaf ov the Liverpool Scool Bord, which he reprezented, sed tha felt strongly sum ov the arguments uzd in the atempt to reform speling. It had bin sed tha saut to alter the speling simply that fasilitiz mite be givn for children ho wer being taut to rēd ; but that woz not the proper wa ov looking at the qestion, espeshaly when tha considerd that six-sevnths ov the children ho resēvd eny educashun, obtānd it at the elementary schoolz. Professor Max Müller had stated that the grāt difficulty the children ov England wer plāst in az regarded educashun woz that tha had to devote so larg a porshun ov thar time to lerning to *spel*. Not only woz this difficulty felt at school, but meny ov them afterwerd forgot whot tha lernt, and this woz to be atributed to the prezent mode ov speling.

Dr. Morris, ov the Filolojical Sosiety, sed that at a meeting ov the Sosiety ov Arts, held on Ma 29th last, the foloing rezolushunz wer past: “(1) That, az the length ov time now found nesenary to tēch children in elementary schoolz to rēd and rīt the English languaj with ēz and corectnes iz atributabl in a grāt mezure to the difficultiz ov the prezent mode ov speling, it iz advīzabl for the promoshun ov educashun that sum chanj shud be efected to remedy the evil.” “(2) That, az much ov the curent speling ov English iz at varians both with etimolojy and pronunsiashun, ther iz further rēzn why a thuro revizium shud be efected.” “(3) That, az no chanj wud be efectual unles the amended speling wer acsepted by school inspecerz, Sivil Servis examinashunz, and public departments, side by side with the prezent speling, the asistans ov Guvernement wil be reqird.

Mr. Richard, M. P., on behaf ov the Welch schoolz, sed the pēpl ov that cuntry dezīrd to lern the English languaj, which woz the languaj ov comers and sōshal life. But under existing sercumstanzes the Welch pēpl wer perplexed and bewilderd on the subject of English speling, and he trusted sum reform in this direcshun wud be brot about.

Mr. A. J. Ellis, F. R. S., sed he had resēvd the foloing leter from Professor Max Müller on the subject: “If u think it nesesity to do so, I fuly athorize u to state that I hav never chānjd the opiniunz which I exprest in the *Fortnightly Review*, on the sientific aspects ov fonetic speling, and that I am az fuly convinst az ever ov the advantaj ov a speling reform.

The Duke ov Richmond and Gordon, in replying to the deputashun, sed: The subject which u hav bin good enuf to bring before me, and which haz bin so ably explānd by the jentlmen ho hav spokn, iz wun on which we ar agrēd, in wun point at lēst, viz: the grave importans ov the subject which u hav introdust, and that iz, the educashun ov the pēpl ov this cuntry. The qestium u hav considerd, iz wun ov such vast importans and ov such larg extent, that it wud not be delt with in eny satisfactory wa but by the Crown being advīzd to ishū a comishun to inqir into the subject. The qestium iz wun ov importans. Az an individual member ov the Guvernement I canot venture to expres evn my ōn opinion ov the subject, stil les when the qestion brot before me iz to advīz the Crown to ishū a comishun to inqir into the subject. Al I can promis iz that I wil plās fārly, and, I hope, candidly, before the Cabinet, the vewz which hav bin put before me to-da with such clērnes by thōz jentlmen ho hav adrest me.

The deputashun then thankd the nōbl duke for his curtesy, and retīrd.

THE HEKTOGRAPH.

[American Printer and Lithographer.]

Glue and glycerine boiled together in suitable quantities form the substance from which type-printers make composition rollers for inking in the type. The cushion for a hektograph is made in the same way. A sufficient quantity of glycerine in the glue will render it elastic and viscous for a length of time.

Let a cushion or plate with a smooth surface be formed of glue and glycerine properly combined, and a thick ink used that contains both glycerine and coloring matter which can be largely distributed. The paper written on is turned upside down on the hektograph composition and under gentle pressure the latter will absorb most of the ink. If a clean sheet of paper be then taken a copy may be made by softly pressing it with the hand on the mass of composition. Whenever the latter is properly prepared, and the ink used is of such consistency as shall presently be described, from 60 to 100 impressions can be produced from a single transfer. After a time the impression will appear lighter and gradually become indistinct, but other copies can be obtained in a similar manner. The surface of the mass of composition is washed with a sponge saturated with water until the top layer is removed, and when the composition is quite dry the new transfer is made as before.

Hektographs are sold at a reasonable price, but any person can make one in the following manner: Take some of the very best glue—gelatine, which is expensive, is not only unnecessary, but is not even as good as the best glue, which is comparatively cheap. Immerse it completely in cold water and let it soak for about twenty-four hours. It will swell considerably during that time, and as it should be under water all through, care must be taken that a sufficient quantity of the latter be used. The glue is then put in an enameled pot which is placed over a slow fire. When the glue is quite melted (not before) a sufficient quantity of glycerine is added and thoroughly mixed. The composition is allowed to cool slowly so that the air which entered during mixing may escape. Whatever foam appears on the surface may be carefully removed with a spoon. The fluid, which now appears bright and clear, is poured into a flat tin box and not touched until it has become cool and stiff. Many recipes prescribe the addition of a white color to the composition, on the ground that this will afterwards render the writing more legible. This is not only superfluous, but it does not allow as many impressions to be subsequently taken from the plates.

If the composition be kept too long on the fire, it will be found when cool, hard, inelastic and viscous enough for only a small number of copies. To remedy this some boiling water may be added and thoroughly stirred in.

It may also happen that the composition is too thin, too elastic, and not viscous enough. This will make the ink spread too much and cause the paper to stick to the composition, but can be remedied by putting it again over the fire. Like all other experiments this one requires some experience, but any thoughtful experimenter will find our directions easy to follow. The following recipes are good and reliable:

COMMON HEKTOGRAPH COMPOSITION.

1.—Best glue	100 parts
Glycerine of 28° Be	500 “
2.—Best glue.....	100 “
Glycerine of 28° Be	400 “
Water.....	200 “

Another composition called chromograph composition has been put upon the market. It has been highly praised, but we find that the ordinary composition answers just as well. We consider the following to be the best of many complex recipes known to us. It has been recommended by a late French Minister of the Exterior :

Glue.....	100 parts
Glycerine	500 “
Kaolin.....	25 “
Water	375 “

A solution of aniline violet (Violet de Paris) is said to be a suitable ink for this process. Many different hektograph inks can be had. Those in which the aniline color is dissolved in water are preferable to those in which it is dissolved in alcohol. One of the best for copying, though not in common use, is made by warming and constant stirring.

Best dry washing blue (powder)	10 parts
Glycerine	10 “
Water	40 to 80 “

The less water used, the more copies can be taken.

FOR PURPLE INK USE

Methyl violet.....	10 parts
Weak acetic acid.....	5 “
Alcohol, 90 per cent.....	10 “
Water	10 “
Glycerine	5 “

FOR RED INK USE

Red ‘Diamond’ aniline	10 parts
Alcohol	10 “
Acetic acid	2½ “
Gum arabic	10 “
Water.....	70 “

Or,

Red ‘Diamond’ aniline	10 parts
Alcohol	10 “
Glycerine	10 “
Water	50 “

For a large number of copies the latter is the better ink.

Mixed purple ink : The blue and red inks may be mixed in order to produce a purple or violet ink of any hue desired.

GREEN INK.

Best dry washing blue (powder)	10 parts
Picric acid	10 “
Alcohol, 90 per cent	30 “
Glycerine	10 “
Water.....	30 “

According to the quantity of picric acid used, different shades of green are obtained.

BLACK HEKTOGRAPH INK.

For a long time it was difficult to get a deep black ink because the black aniline is not soluble in water. The following will give really a good ink :

Methyl violet	10	parts
Nigrosine	20	"
Alcohol	60	"
Glycerine	30	"
Gum arabic	5	"

A YOUNG MAN OF PUSH.

Twelve years ago a young man came to New York in search of employment and fortune. He carried his own trunk to a lodging-house, because he could not afford the luxury of a hired carrier. His honest face and frank speech won for him his landlady's consent to a week's living "on tick." So far good. Now then for the bold plunge. He went down to the offices of the *Herald*, *Times* and *Tribune*, and invested his last shilling in an advertisement in these words :

"I want something to do, and must have it within twenty-four hours. Address 'Push,' this office."

In a little while he had received about three hundred answers to his unique demand for employment. One business man wrote : "Call at nine o'clock to-morrow morning, and I may give you a chance to show how vigorously you can 'push.'"

The tone of that reply pleased the young adventurer, and at the appointed hour he presented himself at the writer's office. The result was a trial engagement, which has continued till this time. Young "Push" is now the confidential man of the house. His salary is ample, and he lives in handsome style in one of the prettiest little homes in New York, where pretty homes, in the poetic sense of the word, are, as we all know, lamentably scarce. "Push" is his dominant characteristic, and his employer has had ten thousand reasons to congratulate himself on the impulse that led him to reply to that little "ad."—*Detroit Free Press*.

The man who has three or five hundred a year and melts down twenty or fifty of it in liquor and cigars, finds a parallel in the young merchant who fills a spacious house with costly furniture, gives dinners and drives a fast horse on the strength of the profits he expects to realize when his goods are sold and his notes are all paid. Let a man have a genius for spending, and whether his income be a dollar a day or a dollar a minute, it is equally certain to prove inadequate. If dining, wining and party-giving won't help him through with it, building, gambling and speculation are sure to. The trouble with a good many clerks now-a-days is they think they must "go it while they are young."—*Commercial Bulletin*.

Do not lose your individuality. Never allow the fear of professional criticism to rob you of your manhood ; read, speak, write and work ; allow no idle moments to absorb your days, and you will move toward perfection in dentistry and success in life.—*R. R. Vaughn*.